LEC-Cellular Interconnection:
Historical Analysis

April 1, 1999

Since the late 1970s, the FCC has emphasized the status of cellular carriers as co-carriers -- rather than end-users -- for purposes of interconnection. The FCC initially encouraged, and shortly thereafter required, LECs to provide technically feasible trunk-side interconnection as requested by cellular carriers.[1] The FCC's statements and rules in this regard, however, did not prevent anticompetitive activities by the LECs. These problems led to the FCC's iterative corrective efforts throughout the 1980s.

The United States Department of Justice ("DOJ"), the United States District Court that enforced the provisions of the modified final judgment ("MFJ"), and the FCC have noted and sought to remedy these ongoing interconnection problems. This paper documents in some detail the significant difficulties facing cellular carriers attempting to interconnect with LECs.

Discussion

In 1974, the FCC concluded an investigation into whether AT&T Corporation and the associated Bell System companies (together, "Bell Companies") were properly implementing the FCC's policies concerning interconnection with other common carriers ("OCCs"). In that decision, the FCC required Bell Companies to furnish to OCCs the interconnection facilities essential to the rendition of all authorized interstate and foreign services.[2] In a companion decision, the FCC noted that the tariff definitions of OCCs

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1 Three basic types of interconnection arrangements are possible. Type I interconnection involves a cellular carrier connecting to the LEC's switch on the "line side." This arrangement treats the cellular carrier as a customer. Type IIA and Type IIB involve the cellular carrier connecting to the LEC's switch on the "trunk side" -- in effect treating the cellular carrier as a co-carrier. Type IIA interconnection offers technical efficiencies not available in a Type I arrangement; Type IIB offers these same efficiencies as well as direct connections to high-volume end offices and interexchange carriers.

2 See Bell System Tariff Offerings of Local Distribution Facilities for Use by Other Common Carriers, Dkt. No. 19896, *Decision*, 46 FCC 2d 413 ¶ 53 (1974).

excluded radio common carriers ("RCCs") from the class of carriers to which facilities were offered under the LEC-OCC facility tariffs.[3] Together, these decisions prompted the FCC to begin an inquiry in an attempt to resolve outstanding interconnection issues between RCCs and the LECs.

The additional proceedings involved informal meetings with industry participants and resulted in the FCC accepting a first Memorandum of Understanding ("1977 MOU") between the parties in 1977. In pertinent part, the 1977 MOU provided that: (1) RCCs are entitled to interconnection arrangements with LECs on reasonable terms and conditions; and (2) RCCs are not, for purposes of these interconnection arrangements, to be considered "customers" of the LECs.[4] The 1977 MOU governed the signatory parties until July 21, 1980. In 1980, the FCC accepted a second Memorandum of Understanding ("1980 MOU") that governed the signatory parties until 1983.[5]

In 1981, the FCC concluded proceedings that established a separate cellular service that allocated two cellular licenses in each market and reserved one for the cellular carrier affiliated with the LEC serving that market.[6] In this proceeding, the FCC began to develop rules governing the interconnection arrangements between LECs and non-wireline cellular carriers. Importantly, the FCC extended to cellular carriers the same treatment it had accepted for RCCs in the 1977 and 1980 MOUs: "[a] cellular system operator is a common

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3 See Offer of Facilities for Use by Other Common Carriers, Dkt. No. 20099, *Memorandum Opinion and Order*, 52 FCC 2d 727 ¶ 17 (1975).

4 See Interconnection Between Wireline Telephone Carriers and Radio Common Carriers Engaged in the Provision of Domestic Public Land Mobile Radio Service under Part 21 of the Commission's Rules, FCC 77-61, *Memorandum Opinion and Order*, 63 FCC 2d 87 at Appendix A ¶ 2 (1977).

5 Interconnection Between Wireline Telephone Carriers and Radio Common Carriers Engaged in the Provision of Domestic Public Land Mobile Radio Service under Part 22 of the Commission's Rules, FCC 80-520, *Memorandum Opinion and Order*, 80 FCC 2d 352 at Appendix ¶ 3 (1980).

6 See An Inquiry into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems; and Amendment of Parts 2 and 22 of the Commission's Rules Relative to Cellular Communications Systems, CC Dkt. No. 79-318, *Report and Order*, 86 FCC 2d 469 ¶¶ 53-57 (1981) ("Cellular Order"); affirmed on recon., 89 FCC 2d 58 (1982) ("Cellular Reconsideration Order"). The FCC reserved one of two cellular licenses for the wireline cellular carrier in a "substantial number of the most populated and congested cities across the country . . . ." See Cellular Order ¶ 38. "Non-wireline cellular carriers" are cellular carriers unaffiliated with a LEC. "Wireline cellular carriers" are cellular carriers affiliated with a LEC.

carrier and not merely a customer. . . . We shall expect all telephone companies to furnish interconnection to cellular systems upon reasonable demand, however, and upon terms no less favorable than those offered to cellular systems of affiliated entities or independent telephone companies."[7] The FCC specifically gave non-wireline carriers the right to request interconnection that is not the same as that used by the wireline cellular carrier, and stated that the non-wireline cellular carrier may not be "locked into the specific interconnection arrangements requested by a wireline [cellular] carrier."[8]

In 1985, the Common Carrier Division of Telocator Network of America ("Telocator") -- a trade association representing the interests of many non-affiliated cellular carriers -- filed a petition seeking relief for cellular carriers in their efforts to gain interconnection to the Bell Operating Companies ("BOCs"). Telocator argued that since the break-up of AT&T, and notwithstanding the FCC's release of an access charge order that specified that cellular carriers are not to be treated as end-users for the purposes of access charges,[9] many BOCs had terminated existing interconnection agreements with cellular carriers. Subsequent negotiations between cellular carriers and BOCs were often marked by difficulties resulting in regulatory intervention and litigation. The petition catalogued a litany of problems faced by cellular carriers, notably that BOCs refused to treat cellular carriers as co-carriers rather than end-users for purposes of assessing access charges, and that cellular carriers were forced either to accept inferior interconnection agreements or to allow the BOC cellular-affiliates to gain a competitively significant "headstart." Telocator petitioned the FCC, among other things, to establish a "Mobile Services Interconnection Ombudsman" to monitor and handle interconnection developments and disputes between cellular carriers and LECs.

While the FCC denied Telocator's request for an ombudsman as premature,[10] Telocator's petition did prompt the FCC to set forth cellular-LEC interconnection guidelines in a "Policy Statement on Interconnection of Cellular Systems."[11] In this Policy

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7 Cellular Order ¶¶ 56-57.

8 Cellular Reconsideration Order ¶ 51.

9 See MTS and WATS Market Structure, CC Dkt. No. 78-72, *Memorandum Opinion and Order*, 97 FCC 2d 834, 882-83 (1984) ("[Cellular carriers] are not end users except to the extent that they use exchange facilities for administrative purposes" and that "[cellular carriers] are not and should not be treated as interexchange carriers under Part 69.").

10 See The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, FCC 86-85, *Memorandum Opinion and Order*, 59 Rad. Reg. 2d (P & F) 1275 ¶ 10 (1986) ("Interconnection Order").

11 See id. at Appendix B ¶ 1 ("Policy Statement").

Statement, the FCC returned to the issue of cellular carriers as co-carriers -- not end-users -- and emphasized that "if the [cellular] system is capable of functioning as an end office, the telephone company should not refuse to provide Type II interconnection."[12] The FCC also emphasized that LECs must treat cellular carriers as co-carriers for purposes of numbering administration.

Unfortunately, the FCC's Policy Statement did not remedy the outstanding interconnection disputes between LECs and cellular carriers. At the request of the FCC, in 1986 Telocator filed a report that asserted "that the cellular operators are experiencing extensive problems in negotiating mutually acceptable interconnection arrangements."[13] Telocator alleged that LECs continued to negotiate in bad faith: (1) the LECs had not accepted the co-carrier status of cellular carriers; (2) many LECs did not view the Policy Statement as legally binding; (3) many LECs continued to impose recurring charges for NXX[14] codes, contrary to the Policy Statement, and impose excess charges for non-recurring functions; and (4) even where LECs acknowledged their obligations, they impeded competition by delaying interconnection, imposing unreasonable technical restrictions, and charging unjustifiably high rates.[15] The FCC conceded that its efforts to resolve cellular interconnection disputes had not been entirely successful up to that point.[16] Rather than address the specific allegations raised in Telocator's report, however, the FCC merely clarified aspects of its Interconnection Order, electing to handle individual complaints against the LECs by way of its Section 208 formal complaint process.[17]

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12 See id. ¶ 3.

13 See The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services, Rep. No. CL-379, *Declaratory Ruling*, 2 FCC Rcd. 2910 ¶ 7 (1987) ("Declaratory Ruling").

14 An NXX code is the first three digits of a typical seven digit telephone number.

15 See Declaratory Ruling ¶ 7 (summarizing Telocator report).

16 See id. ¶ 8.

17 See 47 U.S.C. § 208. On reconsideration, the FCC confronted an argument that typified the intransigence of some LECs concerning interconnection with cellular carriers. Southwestern Bell Corporation, while conceding that it must negotiate with cellular carriers in good faith, insisted that it may unilaterally file an entire interconnection agreement with the FCC notwithstanding the parties' failure to agree on certain issues. The FCC rejected this position noting that it "would not expect the BOC to file a tariff pertaining to [an] 'unresolved issue.' To interpret our statement otherwise . . . would mean that, when an impasse [in negotiations] is reached, the landline company could proceed unilaterally to file its tariffs, thereby rendering meaningless the negotiations already conducted on this matter." The Need to Promote Competition and Efficient Use of Spectrum for Radio Common

In a report filed with the United States Congress in connection with hearings on the MFJ line-of-business restrictions, Telocator identified instances in which a LEC refused to provide a Type II interconnection to a requesting carrier in California, Indiana, New York, North Carolina, Ohio, Oklahoma, and Wisconsin, in addition to various other problems.[18] For example, Indiana Bell, a subsidiary of Ameritech Corporation, refused to permit Indianapolis Telephone Company ("ITC"), a non-wireline carrier, to interconnect on a Type II basis. Only by filing a complaint before the Indiana Utility Regulatory Commission and the FCC was ITC able to obtain a settlement whereby Indiana Bell acknowledged ITC's right to Type II interconnection.[19] Similarly, Ohio Bell, Cincinnati Bell and Wisconsin Bell refused for months to provide Type II interconnection to the non-wireline carriers in Akron, Cleveland, Cincinnati, Canton, Columbus, Dayton and Milwaukee, respectively. After filing a complaint with the Ohio Public Utilities Commission, the non-wireline carriers serving Ohio finally were able to make Ohio Bell and Cincinnati Bell relent and formally acknowledge that Type II arrangements would be acceptable.[20] In the interim, however, the non-wireline carrier in Cleveland was forced to commence service with a Type I arrangement.[21] Following a hearing before the Wisconsin Public Service Commission

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Carrier Services, Rep. No. CL-379, *Memorandum Opinion and Order on Reconsideration*, 4 FCC Rcd. 239 ¶ 14 (1989).

18 See Competitive Status of the Bell Operating Companies: Hearings Before the House Subcommittee on Telecommunications, Consumer Protection, and Finance, 99th Cong. at App. B 1065-1083 (1986).

19 See Indianapolis Tel. Co. Proposed Findings of Fact and Order, Emergency Petition of Indianapolis Tel. Co. to Prevent Disconnection by Indiana Bell Tel. Co., Inc., No. 37671 (Ind. RUC 1985); Stipulation of Partial Settlement -- Technical Matters, filed with the FCC in E-55-5. The dispute was formally resolved before the Indiana PSC. See Emergency Petition of Indianapolis Tel. Co. to Prevent Disconnection of Existing Interconnection by Indiana Bell Tel. Co., No. 37671, 104 Pub. Util. Rep. 4th (PUR) 99, 110-111, 112-113 (Ind. RUC 1989); Indianapolis Tel. Co. v. Indiana Bell Tel. Co., Inc. and American Info. Technologies Corp., File No. E-85-5, *Memorandum Opinion and Order* (1986).

20 See Application for Consent and Approval of a Cellular Tandem Interconnection Agreement Between Certain Wireline Local Exchange Carriers and Cellular Telephone Cos. Pursuant to Section 4905.31, Revised Code, 85-1765-TP-ATR, *Entry*, 1990 Ohio PUC LEXIS 892 (1990); Geodesic Network 4.13 n.49.

21 See Peter W. Huber, The Geodesic Network: 1987 Report On Competition in the Telephone Industry at 4.13 n.49 (1987) ("Geodesic Network").

("WPSC"), Wisconsin Bell relented to the cellular carrier's request and entered into negotiations for a Type II arrangement.

"The Geodesic Network: 1987 Report On Competition in the Telephone Industry," a report prepared by Peter W. Huber -- (a consultant to the DOJ pursuant to the MFJ), -- summarized the problems cellular carriers encountered in their post-divestiture negotiations with BOCs.

> For a period, several BOCs refused to provide Type II interconnection to non-wireline carriers. Non-wirelines were forced to choose between accepting Type I interconnection and delaying the start of service until the issue was resolved. Numerous complaints were filed by non-wireline carriers with state [public utility commissions] and the FCC, and a few BOCs threatened to cut off interconnection altogether if non-wirelines refused to adhere to proffered contracts for Type I interconnection.[22]

Mr. Huber concluded that "[h]ead-to-head competition between LECs and non-wireline [carriers] in the provision of local mobile services raises many questions about discriminatory access to the LEC exchange."[23]

In 1987, Judge Harold Greene, relying in part upon Mr. Huber's findings, denied the BOCs' request to lift the various line of business restrictions imposed upon them as part of the MFJ.[24] The court noted Mr. Huber's conclusions that "Regional Companies have already (1) denied technically efficient interconnections to competing cellular carriers; (2) filed tariffs which set higher rates for competing cellular carriers than were offered for their own interconnections; (3) imposed unreasonable and non-cost-based charges for interconnection; (4) threatened to discontinue service to competing cellular carriers if they did not accept whatever interconnection contracts were offered to them; and (5) refused to provide compensation to carriers that terminate or originate cellular calls on behalf of a landline carrier."[25] The existence of these discriminatory acts, in conjunction with several RBOCs' refusal to provide equal access to cellular carriers, contributed to the court's decision to leave the MFJ restrictions intact.[26]

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22 Id. at 4.13 (footnote omitted).

23 Id. at 4.18.

24 See United States v. Western Elec. Co., 673 F. Supp. 525 (D.D.C. 1987); affirmed 900 F.2d 283 (D.C. Cir. 1990).

25 Id. at 580.

26 See id. at 551.

In recent FCC proceedings involving CMRS services such as PCS, the FCC has recognized the potential for problems similar to those experienced by cellular carriers to arise for LEC-CMRS interconnection.[27] It therefore extended the cellular interconnection rules to LEC interconnection with CMRS carriers.[28]

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27 Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Services, CC Dkt. No. 94-54, *Notice of Proposed Rulemaking and Notice of Inquiry*, 9 FCC Rcd. 5408 ¶¶ 102, 118 (1994) ("The period following the Commission's early licensing of cellular service was marked, however, by difficult negotiations between LECs and cellular licensees. Further, at divestiture the BOCs renegotiated their arrangements with private carriers. For a time, several BOCs refused to provide trunkside interconnection to non-wireline carriers. . . . We recognize that new market entrants, such as PCS providers, might be concerned that despite the obligation that they negotiate in good faith, LECs would treat these new entrants in much the same way the LECs treated cellular providers in the early 1980s. Consequently, we ask interested parties to identify any changes to the existing system of negotiated contracts that might improve the current situation and address the concerns of CMRS providers or LECs.").

28 See Implementation of Sections 3(n) and 332 of the Communications Act; Regulatory Treatment of Mobile Services, GN Dkt. No. 93-252, *Second Report and Order*, 9 FCC Rcd 1411 ¶ 230 (1994).